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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,749	02/07/2002	David Yee	220772009600	1603
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Rimas T. Lukas Morrison & Foerster LLP 755 Page Mill Road Palo Alto, CA 94304-1018				
			EXAMINER CASAREGOLA, LOUIS J	
			ART UNIT 3746	PAPER NUMBER

DATE MAILED: 10/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,749

Applicant(s)

YEE ET AL

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 1-13,23-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-19,22,46-48 is/are rejected.
- 7) ☒ Claim(s) 20-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

Election

In their latest response, applicants elect the invention of Group I and the species involving control of catalyst inlet temperature based on load, i.e. as specified in claim 14. The species election was made with traverse. Applicants' arguments have been considered but are not however effective in demonstrating that the election requirement is improper.

Applicants argue that examination of all species in Group I would not be a serious burden since these species are classified in the same subclass, searchable together, and subject to similar considerations with respect to the prior art. Applicants' position on this point however is strongly disputed. Contrary to what applicants suggest, the examination burden is not limited to a single combined prior art search. Multiple species, such as those in the present application, normally require finding and applying additional reference material along with supporting arguments for each additional species examined. Concurrent examination of multiple species would thus typically involve a significant search and examination burden even when all searches are coextensive.

For the reasons discussed above, the restriction and species election requirements are considered proper and are consequently made final.

Applicants have listed claims 14-22, 30, and 46-48 as readable on the elected group and species. It is submitted however that claim 30 cannot be properly included

on this list since it is not in fact limited to the elected species or to a reasonable number of species (37 CFR 1.146). Claim 30 recites twenty-five different thermodynamic control parameters usable alone and/or in combination to form a vast number of alternatives control schemes not all compatible with the elected species. The scope of claim 30 was pointed out in the original election requirement (page 4), but applicants' response fails to identify a single alternative as properly representing the elected subject matter within the claim. Note also that claim 30 is multiply dependent on both claims 29 and 48, and any chain of dependency that includes non-elected claim 29 adds further non-elected subject matter to claim 30. Claim 30 is thus neither limited to a single elected species nor properly generic, consequently, claim 30 is withdrawn from consideration and included with non-elected claims 1-13, 23-29, and 31-45. An action on the merits of elected claims 14-22 and 46-48 is set forth below.

Claim Rejections - 35 USC 112

Claims 14-19, 22, and 46-48 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The claims are drawn to a method of controlling a combustion system that uses load as a control parameter; see for example, claim 14, lines 8-13. This claimed

reference to a load however is vague and indefinite since the claims include nothing capable of driving or powering any device that would normally be identified as a load. In the invention as disclosed, the combustion system is part of a gas turbine engine in which the load is the load driven by the turbine, but the rejected claims make no mention of a turbine or any similar device.


Allowable Subject Matter

Claims 20 and 21 contain allowable subject matter and will be allowed if rewritten in independent form. Claims 14-19, 22, and 46-48 will also be allowed if independent claim 14 is amended to identify the recited load as the load on a turbine associated with the claimed combustion system. Allowance of this application is further contingent upon cancellation of non-elected claims 1-13, and 23-45.

References

Dalla Betta et al '276 and '003 are cited as disclosing pertinent examples of prior art control methods for catalytic combustion systems.

L. J. Casaregola
703-308-1027 (M-F; 7:30-4:00)
703-872-9302 FAX (9303 After Final)
October 27, 2003


LOUIS J. CASAREGOLA
PRIMARY EXAMINER